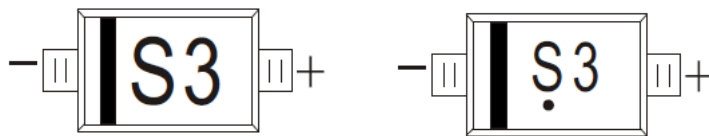
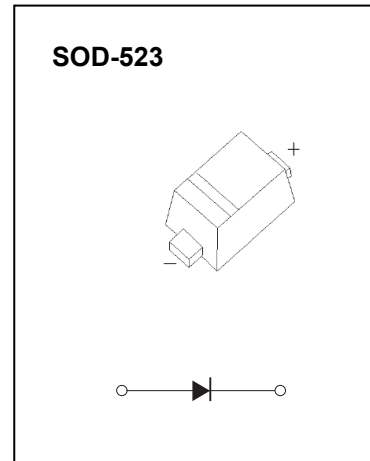


SCHOTTKY BARRIER DIODE

FEATURES

- Small pacakage
- Low forward voltage
- Low reverse current

MARKING: S3



The marking bar indicates the cathode
 Solid dot = Green molding compound device,if none,
 the normal device.

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25 °C

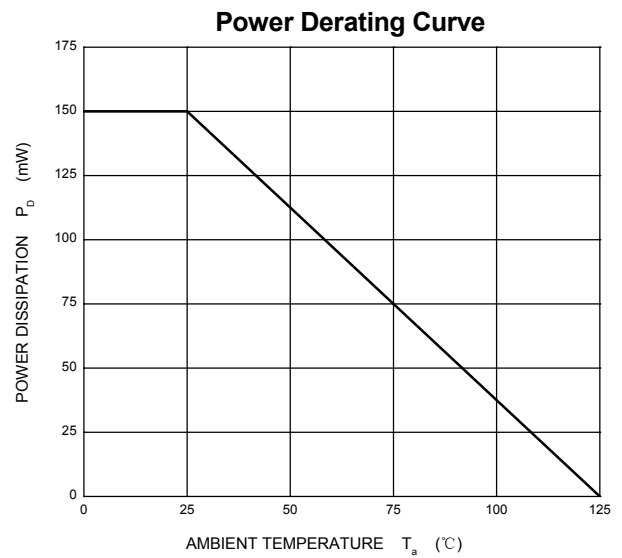
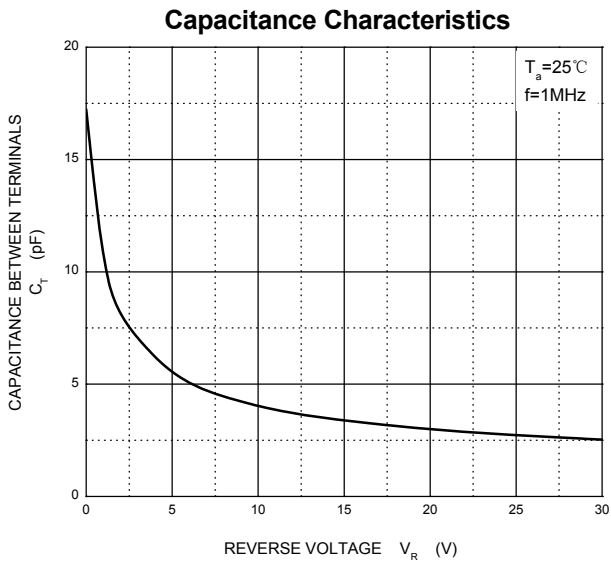
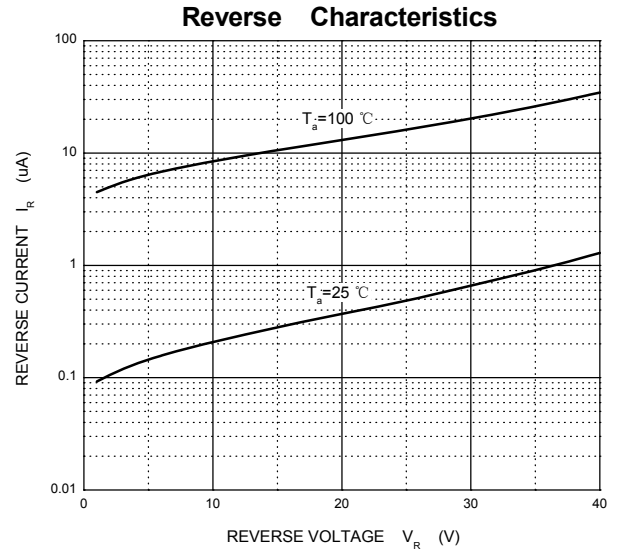
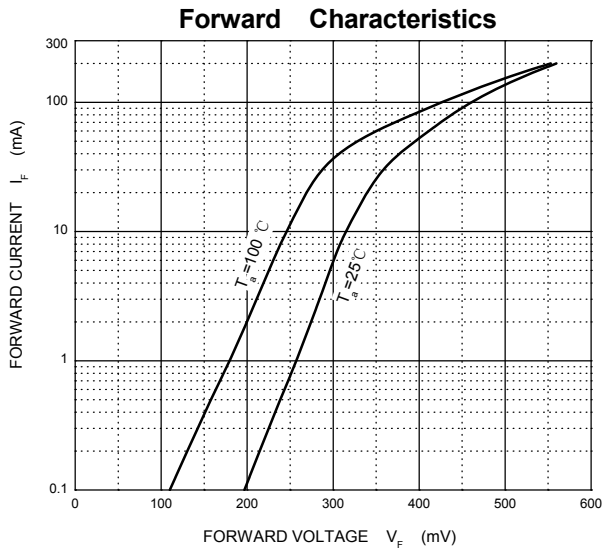
| Parameter | Symbol | Limit | Unit |
|---|-----------|----------|------|
| Peak reverse voltage | V_{RM} | 45 | V |
| DC reverse voltage | V_R | 40 | V |
| Maximum (peak) forward current | I_{FM} | 300 | mA |
| Average forward current | I_O | 100 | mA |
| Non-repetitive Peak Forward Surge Current@t=8.3ms | I_{FSM} | 1000 | mA |
| Power dissipation | P_D | 150 | mW |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -55~+150 | °C |

Electrical Ratings @Ta=25°C

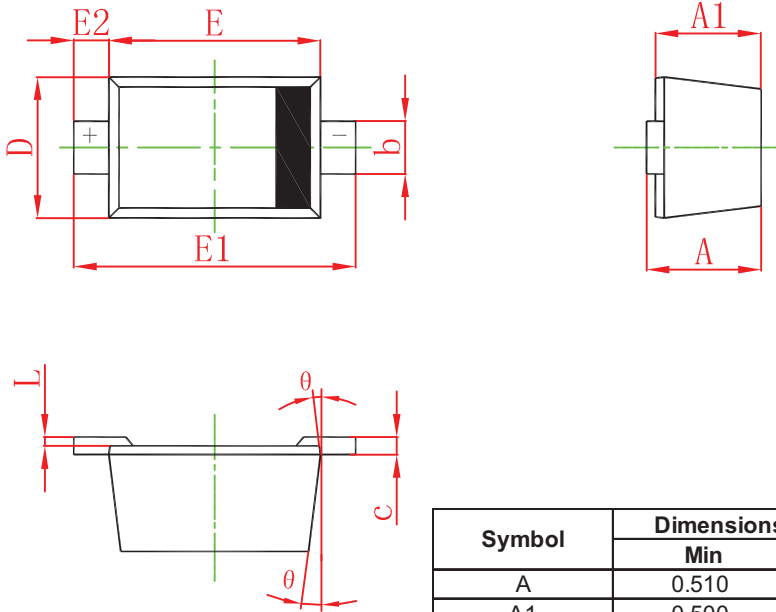
| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-------------------|----------|-----|------|------|---------|-----------------|
| Forward voltage | V_{F1} | | 0.28 | | V | $I_F=1mA$ |
| | V_{F2} | | 0.36 | | V | $I_F=10mA$ |
| | V_{F3} | | 0.54 | 0.60 | V | $I_F=50mA$ |
| Reverse current | I_R | | | 5 | μA | $V_R=10V$ |
| Total capacitance | C_T | | 18 | 25 | pF | $V_R=0, f=1MHz$ |



Typical Characteristics

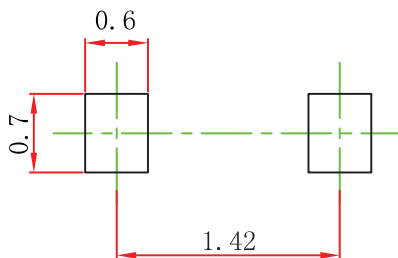


SOD-523 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.510 | 0.770 | 0.020 | 0.031 |
| A1 | 0.500 | 0.700 | 0.020 | 0.028 |
| b | 0.250 | 0.350 | 0.010 | 0.014 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 0.750 | 0.850 | 0.030 | 0.033 |
| E | 1.100 | 1.300 | 0.043 | 0.051 |
| E1 | 1.500 | 1.700 | 0.059 | 0.067 |
| E2 | 0.200 REF | | 0.008 REF | |
| L | 0.010 | 0.070 | 0.001 | 0.003 |
| θ | 7° REF | | 7° REF | |

SOD-523 Suggested Pad Layout



Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.05mm.
 3. The pad layout is for reference purposes only.